# Product Specifications









## 35409-20

EWP52-59, HELIAX® Premium Elliptical Waveguide, 5.925-6.425 GHz, black non-halogenated, fire retardant polyolefin jacket

#### **Construction Materials**

Jacket Material	Non-halogenated, fire retardant polyolefin
Conductor Material	Corrugated copper
Tacket Color	Black

## **Dimensions**

Cable Volume	1045.0 L/km   11.3 ft³/kft
Cable Weight	0.88 kg/m   0.59 lb/ft
Diameter Over Jacket (E Plane)	57.20 mm   2.25 in
Diameter Over Jacket (H Plane)	33.30 mm   1.31 in

## **Electrical Specifications**

Operating Frequency Band	5.925 – 6.425 GHz
eTE11 Mode Cutoff	3.650 GHz
Group Delay	126 ns/100 ft @ 6.200 GHz 413 ns/100 m @ 6.200 GHz

## **Environmental Specifications**

Installation Temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)

## **General Specifications**

Brand	HELIAX®
-------	---------

## **Mechanical Specifications**

Fire Retardancy Test Method	UL 1666/CATVR/CMR
Maximum Twist	3.00 °/m   1.00 °/ft
Minimum Bend Radius, Multiple Bends (E Plane	305.00 mm   12.00 in
Minimum Bend Radius, Multiple Bends (H Plane	810.00 mm   32.00 in
Minimum Bend Radius, Single Bend (E Plane)	200.00 mm   8.00 in
Minimum Bend Radius, Single Bend (H Plane)	560.00 mm   22.00 in
Toxicity Index Test Method	IEC 60754-2

## Note

Performance Note	Values typical, unless otherwise stated

#### **Standard Conditions**

Attenuation, Ambient Temperature 24 °C   75 °F

## Product Specifications



35409-20

POWERED BY



Average Power, Ambient Temperature 40 °C | 104 °F Average Power, Temperature Rise 42 °C | 76 °F

#### **Return Loss/VSWR**

 Frequency Band
 VSWR
 Return Loss (dB)

 5.925-6.425 GHz
 1.06
 30.70

## **Attenuation**

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	<b>Group Velocity %</b>
5.9	1.209	3.965	5.917	78.8
6.1	1.186	3.89	6.032	80.3
6.3	1.166	3.825	6.134	81.6

## **Regulatory Compliance/Certifications**

AgencyClassificationUL/ETL CertificationCATVR/CMRRoHS 2011/65/EUCompliant

China RoHS SJ/T 11364-2006 Below Maximum Concentration Value (MCV)

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system





<sup>\*</sup> VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)

<sup>\*</sup> VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies

<sup>\*</sup> Custom length performance: Call +1-800-255-1479 (N. America), 1-779-435-6500 (Int'l.), or your local Andrew representative